Mechanics of Composite Materials 2014 vol.50 N3, pages 267-278

# Theoretical-Experimental Method for Determining the Parameters of Damping Based on the Study of Damped Flexural Vibrations of Test Specimens 2. Aerodynamic Component of Damping

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## Abstract

The aerodynamic component of damping of a vibrating plate in the range of parameters characteristic of damped flexural vibrations of test specimens is investigated. On the basis of a large series of numerical simulations in the dynamics of two-dimensional flow of gas around a plate, we managed to suggest a unified approximating equation for the damping constant in terms of dimensionless parameters of the process considered. © 2014 Springer Science+Business Media New York.

http://dx.doi.org/10.1007/s11029-014-9413-3

## Keywords

computational fluid dynamics, damping, direct numerical simulation, drag coefficient, flexural vibrations of plates, flow around a vibrating plate